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ABSTRACT

The development of theories to explain decision-making requires a model that identifies the factors relevant to decision-making. Seven sets of explanatory factors--called the "seven analytical A's"--should be analyzed. They include (1) axiological factors, or those related to values; (2) ten axiomatic factors comprising socioeconomic, territorial, organizational, psychological, and other givens; (3) alternatives, or factors (such as cost, uncertainty, and risk) that influence decisions; (4) "architections," or practical planning factors like titles, persons responsible, specifications, resources, and results; (5) human and material allocation factors; (6) the actions involved in implementing decisions; and (7) the appraisal factors on which evaluations of decisions will be based. (RW)

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ANALYTICAL FACTORS IN DECISION MAKING: THRUST TOWARD THEORY DEVELOPMENT

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ANALYTICAL FACTORS IN DECISION MAKING:
THRUST TOWARD THEORY DEVELOPMENT

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The literature of decision making is found in various fields, such as administration, economics, social psychology, sociology, and political science -- to name the more prominent. Decision making has been recognized as integral, central, and primary functions of administration, particularly by Simon, (1957) and Griffiths, (1958).

Several of the principal contributors to the theoretical constructs of decision making are Bernard, (1938); Bross, (1953); Simon, (1957); Griffiths (1958); Dill, (1964); and Taylor, (1965). It is upon these works that several analytical factors in decision making have been highlighted by the author, as a thrust toward further theory development.

Theory development is considered herein, as the movement and growth of concepts which help to explain variables, factors, and intricacies that are involved in decision making. The purpose of theory then is to further understanding of the vast array of components, be they simple or complex, which are part of decision making. The natural ultimate use of the products of theory development in decision making, would be to make smarter predictions -- for more rational choices.

The Seven Analytical A's in Decision Making. The Seven Analytical A's are designed as an instructional and research model for considering relevant factors in decision making. The components of the model are: one: the analysis of axiological factors; two: analysis of axiomatic factors; three: analysis of alterna-

tives; four: the analysis of architections; five: analysis of allocations; six: analysis of actions; and seven: analysis of appraisal factors.

Further exposition of model components. A more detailed description of the complex factors involved in decision making is provided by analyzing salient components: The development of the model, termed the Seven Analytical A's in Decision Making is designed to explain the possible vast array of variations that impact on the matter at hand.

1. Analysis of Axiological Factors. The axiological factors involve the complex matter of values. The operant concept focuses on the idea that a value is a motivating force, a selecting factor, an appraising concept which enables us to make choices among alternative paths of action.

2. Analysis of Axiomatic Factors. The axiomatic factors include the givens of the situation which impact on decision making. There are many givens. Among the givens are: (1) socio-economic factors; (2) territorial factors; (3) significant people factors; (4) coalitional factors; (5) organization/institutional factors; (6) psychological factors; (7) sociological factors; (8) economic factors; (9) legal factors; and (10) governmental factors.

3. Analysis of Alternatives. The analysis of alternatives may center upon various factors that may influence the choice of the final decision. These factors include (1) utility; (2) cost; (3) degree of certainty of the decision; (4) degree of risk; (5) degree of uncertainty.

4. Analysis of Architections (Planning). The analysis of the actual blueprints or plans of the major decision include very

practical elements. These practical elements include: (1) specific label or title of the plan; (2) responsible persons or agencies for the implementation of the plan; (3) specific details of goals and objectives of the plan; (4) detailed specifications of the implementation of the plan; (5) resources needed, and (6) expected results.

5. Analysis of the Allocation of Human and Material Resources. The analysis of the allocation of human and material resources is a vital component in the decision-making process. It is only at the time when the consideration of the allocation of human and material resources necessary for the decision making needs to be specified that the inherent difficulties of "new concepts or ideas" can be more precisely understood. The analysis of the allocation of human and material resources include the most crucial components in the decision making process. The newer and the more innovative the idea which is to be decided upon, the more difficult is the staffing of human resources. The component of material and economic resources are equally as crucial and difficult.

6. Analysis of Actions. The analysis of the action or the work in the implementation of the decision is subject to several factors. Among these factors are: (1) initial phase operations; (2) quality of work flow; (3) adequacy of planning specifications in terms of congruency with expressed goals and objectives; (4) performance of workers; (5) medial phase operations; (6) advanced and ongoing phase operations; (7) quality of the results or production from the work.

7. Analysis of Appraisal Factors. This final analytical component is the evaluative function to determine the adequacy, appropriateness, the validity, the reliability, the goodness, and the success of the decision making process. It is a given, that the appraisal function has been incorporated at every stage of the decision-making process. The analysis of the appraisal function is the process of ascribing worth or value to a product, system,

or process. Questions that may guide the analysis of the appraisal functions are:

1. Were the salient axiological components used in the decision-making process appropriate, valid, and good?
2. Were the axiomatic factors selected dominant, crucial, or imperative in conceptualizing the new plan?
3. Were the allocations of human and material resources valid, reliable, good and appropriate for the designed plan?
4. Were the alternatives most optimal in terms of utility, cost and certainty for the decision made?
5. Were the best plans (architections) made in the light of the goals desired, the resources available and the conception of the action phase as a consequence of the decision making process?
6. What is the "proof of the pudding" factor of the decision in its actual operation? Where are the bugs? What needs to be done to make the operation optimal?
7. How valid, reliable, adequate and appropriate is the appriaisal system? What internal and external criteria are used in this phase of the decision-making process?

PRÉCIS

The Seven Analytical A's in Decision Making is a model which attempts to be comprehensive. Where there are gaps in trying to make particular decisions, appropriate factors are encouraged to be added. Every decision-making process has its own unique and peculiar circumstances. It is understood that many of the factors that impinge upon decisions are a result of

intuition. Not every decision making process operates according to the "rule book of rationality." There are some factors which are too painful, too private, too controversial, too selfish, too negative, too evil, too base, too taboo -- to be expected to be dealt with in a very objective or rational manner. Furthermore, it is understood, that a full analysis in terms of time, energy and money. So then what is the value of the analytical system in decision-making? It should point the way -- provide one with the tools -- to make the most persuasive case for the most optimal decision under the specific circumstance.

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